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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,248	04/14/2004	Dragan Veskovic	LUTR-0241/03-055 P2	6423
23377	7590	09/21/2006	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET PHILADELPHIA, PA 19103			VO, TUYET THI	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/824,248

Applicant(s)

VESKOVIC ET AL.

Examiner

Tuyet Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-66 is/are pending in the application.  
4a) Of the above claim(s) 1-24, 49-58, 65 and 66 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) 25-34, 36-48 and 59-64 is/are rejected.  
7) ☒ Claim(s) 35 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 10 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

***DETAILED ACTION***

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-24 are drawn to a processor for controlling plurality of ballasts via inverter corresponding, classified in class 315, subclass 312.

II. Claims 25-48 and 59-64 are drawn to a microprocessor utilized communication ports for controlling a gas discharge lamp, classified in class 340, subclass 531.

1. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed in invention I does not require the particulars of the subcombination as claimed in inventions II for patentability, and (2) that each subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed in the invention I does not require the particulars of the subcombinations as claimed in the inventions II because a discharge lamp is controlled by a processor for controlling a level of a lamp ballast output signals obtaining via lamp ballast input terminals and does not require a specific arrangement of communication ports as claimed in the invention II. The subcombination as in the invention II has separate utility such as providing commands conducting via communication ports as channels for controlling lamp's

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behavior while the claims in the invention I utilizes simple inverter powers to energize different lamp ballasts.

2. Applicant's election with traverse of the invention II including claims 25-48 and 59-64 in the reply filed on June 26, 2006 is acknowledged. The traverse is on the ground of the combination and subcombination. This is not found persuasive because a discharge lamp in the invention I is controlled by a processor for controlling a level of a lamp ballast output signals obtaining via lamp ballast input terminals and does not require a specific arrangement of communication ports as claimed in the invention II.

3. Because these inventions are distinct for the reasons given above and the search required for each group of the inventions is different from each other, restriction for examination purposes as indicated is proper, therefore, withdrawal of the restriction is not warranted in this office action.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 25-31, 34, 36-45, 59-62 and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Stam et al. (US Pat. 6,498,440), hereinafter Stam.

Stam discloses an electronic ballast for driving a gas discharge lamp (Fig. 4), comprising an inverter (Q1-Q6) for producing a high frequency drive voltage for driving a lamp current in said gas discharge lamp; a microprocessor (401) electrically connected to said inverter for directly controlling said inverter (Q1-Q6) to control the said lamp current; and a port (PORT 0 – PORT 3) in electrical communications with said microprocessor (401) for sending messages comprising at least one of a command (PORT 0 - PORT 3) and ballast configuration (PORT 3), wherein the ports in electrical communications with said microprocessor for sending messages to a lighting load (101-103), and wherein a port (PORT 0 - PORT 2) in electrical communication with said microprocessor for at least one of receiving messages, and both receiving and sending messages (PORT 3), in that, microprocessor contains a program for determining a status of said electronic ballast and sending a message indicative of said status lamp (illumination/dimming levels) via said port. A memory (402) electrically connected to said microprocessor; and a set of data stored in said memory for facilitating operation of said ballast, wherein a portion of said set of data is changed by said microprocessor in response to a predetermined message received via said port.

6. Claims 25-30, 37-40, 45, 46, 60 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Helal et al. (US Pat. 5,154,504), hereinafter Helal.

Regarding claims 25-30, 37-40, Helal discloses an electronic ballast (Fig. 2) for driving discharge lamp (23), comprising

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An inverter (21) for producing a high frequency drive voltage for driving a lamp current in the discharge lamp (col. 5, lines 52-57);

A microcomputer (20) electrically connected to the inverter (21) for directly controlling the inverter to control the lamp current; and

A port in electrical communications (45) with the microcomputer (Fig. 4) for sending message comprising at least one of command and ballast configuration (col. 8, lines 37-42), wherein the port (45) having one of receiving message (232-LINK, marked by examiner) and both receiving (47) and sending message (48). The microcomputer contains a program for responding to a message received via the port by sending a message via the port (Figs. 4 and 5).

Regarding claims 34, 36, 45-46, 60 and 62, Helal discloses an electronic ballast for driving at least one gas discharge lamp, comprising

an inverter circuit (21) producing a high frequency drive voltage for driving a lamp current in said at least one gas discharge lamp;

a microcomputer (20) connected directly to the inverter (21) and control said inverter to control said lamp current to a desired level;

at least one port (C1-C8) connected to said microprocessor for receiving a message and providing said message to said microprocessor, wherein a memory included in microprocessor; and a set of data stored in said memory for carry automatic self test, program test and other for controlling the lamp level in an emergency, said microprocessor being adapted to change a portion of said set of data in response to

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receiving a predetermined message via a Key pad or other sensing signals (voltage sensor, current sensor, light sensor, IR transceiver)

9. Claims 37-46, 48 and 59-61 are rejected under 35 U.S.C. 102(e) as being anticipated by Ribarich et al. (US Pat. 6,771,029), hereinafter Ribarich.

Ribarich discloses an electronic ballast for driving a gas discharge lamp (Fig. 1), comprising

an inverter circuit (18, 24) producing a high frequency drive voltage for driving a lamp current in the gas discharge lamp;

a microprocessor (22) connected to said inverter circuit (18, 24); said microprocessor directly controlling said inverter to control said lamp current to a desired level;

ports (A, B, marked by examiner) connected to said microprocessor for receiving a message/command and providing said message/command to said microprocessor; a memory (MEMORY) connected to said microprocessor; and a set of data stored in said memory, said microprocessor being adapted to change a portion of said set of data in response to receiving a predetermined message via the ports (col. 6, lines 61-67 and col. 7, lines 1-28), wherein a program stored in the microprocessor (22) for determining a status of the blast (18) via at least one port (B) when detecting a fault/failure condition of the inverter.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 32 and 34 are reject rejected under 35 U.S.C. 103(a) as being unpatentable over Stam.

Stam discloses substantially the claim invention as noted above except for comprising a transducer in electrical communication with said microprocessor for providing a signal perceptible to a person or said signal is an audible signal.

It would have been an obvious matter of design choice to utilize transducer or audible signal in order to communicate data of ballast to a microprocessor/microcomputer for a particular application. Such implementation of digital ports for interfacing data signals with a central processing unit is considered as a routine skill in the art since digital port is well known to partisan.

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12. Claims 47, 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halel.

Halel discloses substantially the claim invention as noted above except for a port comprising a digital port.

It would have been an obvious matter of design choice to utilize digital ports in order to communicate data of ballast to a microprocessor/microcomputer for a particular application. Such implementation of digital ports for interfacing data signals with a central processing unit is considered as a routine skill in the art since digital port is well known to artisan.

#### ***Allowable Subject Matter***

13. Claim 35 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter: the prior fails to establish a portion of a set of data includes information relating to at least one of the ballast's location and the ballast's duties in a system.

#### ***Correspondence***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyet Vo whose telephone number is 571 272 1830.

The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571 272 1740. The fax phone numbers for the organization where this application or proceeding is assigned are 571 273 8300 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 2800.

Information regarding the status of an application or status information for publishing/unpublishing applications may be obtained from the Patent Application Information Retrieval (PAIR) system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PAIR system, contact the Electronic Business Center (EBC) at toll free 866-217-9197.

A handwritten signature in black ink, appearing to read 'Tuyet Vo', is written over a horizontal line.

Tuyet Vo

Primary Examiner

September 18, 2006